

Outstanding
Image of 580TVL



SAMSUNG TECHWIN SAMSUNG

SALES NETWORK

- **SAMSUNG TECHWIN CO., LTD.**
145-3, Sangdaewon-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do, 462-120, Korea
TEL : +82-31-740-8151-8 FAX : +82-31-740-8145
- **SAMSUNG OPTO-ELECTRONICS UK, LTD.**
Samsung House, 1000 Hillwood Drive, Hillwood Business Park Chertsey, Surrey KT16 0PS
TEL : +44-1932-45-5308 FAX : +44-1932-45-5325

www.samsungtechwin.com P/No. : Z6806089001A
www.samsungcctv.com VAN 08. 04

High Resolution Mini Dome Camera SID-53/56 User's Manual

Thank you for purchasing a SAMSUNG CCD CAMERA.
Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

ENGLISH



Samsung Techwin cares for the environment at all product manufacturing stages to preserve the environment, and is taking a number of steps to provide customers with more environment-friendly products. The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

Warnings & Cautions

This information is provided to ensure your safety and to prevent any losses, financial or otherwise. Please read it carefully and use the product accordingly.

- * For product inquiries, please contact the retail shop where you bought the camera. The use of equipment such as an aerial ladder while providing after-sales service shall be at your expense.
- * Separate the power plug when thunder crashes or lightning flashes.
- * This product is support equipment for surveillance system. Therefore, we can't compensate for material loss and/or personal injuries by robbery, fire, natural disaster or something like this type.

Warning/Attention/Special Mark Messages

	Ignoring this information may result in material loss and/or serious personal injuries including death.		Ignoring this information may result in material loss and/or a slight injuries.
	Indicates "Never Allowed."		Indicates "No Disassembling."

Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. The product should not be mixed with other commercial wastes for disposal.

Precautions

Do not install under extreme temperature conditions.



Use only under temperature conditions between -10°C and +50°C. Provide good ventilation when using in high temperature conditions.

Do not install under unstable lighting conditions.



Severe lighting changes or flickering may hinder normal camera operation.

Do not install under unstable lighting conditions.



May cause a product malfunction.

Do not install in high humidity environment.



May lower image quality.

Avoid touching the camera lens.



The lens is the most important component of the camera. Be careful not to smear it with fingerprints.

Avoid touching the camera lens.



May damage the CCD.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION - This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CAUTION : To prevent electric shock and risk of fire hazards:

- ◆ Do NOT use other than specified power source.
- ◆ Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.

Do not expose the camera to radioactivity.



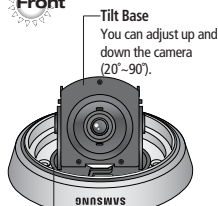
If it is exposed to radioactivity, For heated CCD, it will be out of order.

Notes

- If the camera is exposed to spotlight or object reflecting the strong light, smear or blooming may occur.
- Please check the power whether it satisfies the normal specification before connecting the camera.

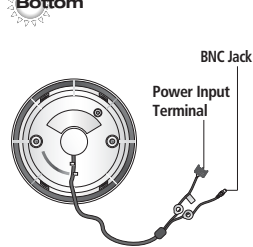
Getting to Know Your Camera

Front



Pan Base
You can rotate the lens from 360°

Bottom



Thank you for purchasing a SAMSUNG CCD CAMERA.
Before operating the camera, confirm the camera model and proper input power voltage. In order that you can understand this manual thoroughly, we'll introduce our model description.

SID-53 SERIES, 56 SERIES

- NTSC models : SID-53N, SID-56N
- PAL models : SID-53P, SID-56P

Model Description

- SID-53X SID-56X
- SIGNAL SYSTEM
N → NTSC Model
P → PAL Model

Features

Ultra High Resolution

By adopting a diagonal 6mm(1/3") 410,000(NTSC) pixel, 470,000(PAL) pixel SONY CCD, the camera produces clear picture quality with a horizontal resolution of 580 TV lines for color.

Excellent Sensitivity

The built-in high sensitivity COLOR CCD enable a clear image even in 0.04 Lux or lower illumination.

SSNR (Samsung Super Noise Reduction) Function

The high performance WIN-IV DSP chip dramatically reduces the gain noise in digital image processing, producing clear, sharp images in low lighting environments.

Pan and Tilt

Pan and tilt are available after installing camera.

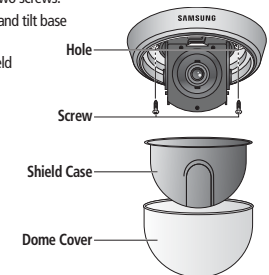
Accessories



Installation

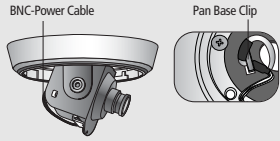
Installing Camera

1. Fix the camera to a ceiling using two screws.
2. After fixing it, adjust its pan base and tilt base properly.
3. After setting them, secure the shield case and dome cover.



Notes

- When installing the camera on a ceiling not to disturb adjustment of Tilt Base angle fix the BNC-Power Cable on the Pan Base clip.



For DC Power Type

Resistance of copper wire [at 20°C (68°F)]

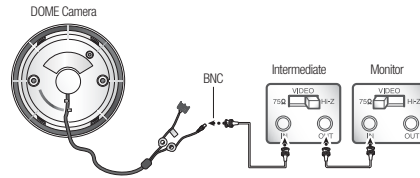
Copper wire size (AWG)	#24(0.22mm ²)	#22(0.33mm ²)	#20(0.52mm ²)	#18(0.83mm ²)
Resistance (Ω / m)	0.078	0.050	0.030	0.018
Voltage Drop (V/m)	0.028	0.018	0.011	0.006

- As the voltage drop according to the length of the cable in the above table, a camera may malfunction if there is an excessively long cable run.
 - Voltage for camera operation: 12V DC ±10%
 - Voltage drops in the above table are variable according to types of cable manufacturer.

Connection to Monitor

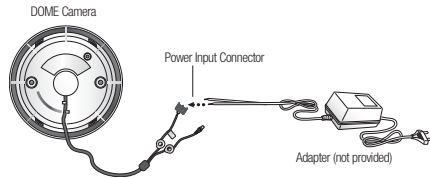
Connect the VIDEO-OUT jack to the VIDEO-IN jack of monitor.

- As a connecting method varies according to instruments, refer to the manual supplied with the instrument.
- Connect the cable after power is turned off.
- Set the 75Ω / Hi-Z selection switch. If it is a intermediate device, switch it to Hi-z and if it is final device, switch it to 75Ω. (Please refer to the Monitor Manual.)



Connection to Power

- Connect the adapter to the power input connector as shown in the figure below. Use a DC 12V. (The Adapter is not provided with the Dome Camera.)

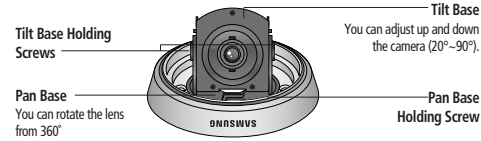


MINI DOME CAMERA 9 USER'S MANUAL

MINI DOME CAMERA 10 USER'S MANUAL

Panning & Tilting Control

You can adjust the Panning and Tilting angle freely. (Panning angle: 360°, Tilting angle: 20°~90°)



- Adjustment Panning angle: After attaching the dome camera to a ceiling, adjust the panning angle for better monitoring area by rotating the Pan Base. The panning angle can be adjusted 360° freely.
- Adjustment Tilting angle: After attaching the dome camera to a ceiling, adjust the tilting angle for better monitoring area by rotating the Tilt Base. The tilting angle can be adjusted to 20° from 90° freely. (based the ceiling surface)

Notes

- After loosening Pan or Tilt Base holding screws, adjust its angle. And then tighten screws again.
- In case of adjusting the tilting, do not take the lens for preventing physical shocks. Please take the Tilt Base.
- This dome camera is to be installed on the ceiling by factory default.

MINI DOME CAMERA 11 USER'S MANUAL

Camera Operation

Built-in functions of the SID-53, SID-56 Camera include the following

Auto Functions	Setting	Descriptions
Electronic Shutter Speed	ESC	The shutter is controlled according to the brightness of screen by automatically.
WHITE BALANCE	ATW	It can be used within the color temperature range 1,800K~10,500K.
BACKLIGHT	BLC	It helps view a desired area of picture at the backlight condition.
GAIN CONTROL	HIGH	The gain increases or decreases within the range of 6dB~34dB
SSNR (Noise Reduction)	ON	There is sufficient reduction in noise levels without causing much ghost imaging.
SENS UP	AUTO	It helps maintain a bright, clear screen image by automatically detecting changes in the level in low light levels without causing much ghost imaging.
DAY/NIGHT	AUTO	The mode is switched to Color in a normal environment, but switches to B/W mode when ambient illumination is low.
SHARPNESS	ON	The outline of the video image becomes cleaner and more distinctive.
LENS SHADE	ON	It helps correct shading of Lens.

MINI DOME CAMERA 12 USER'S MANUAL

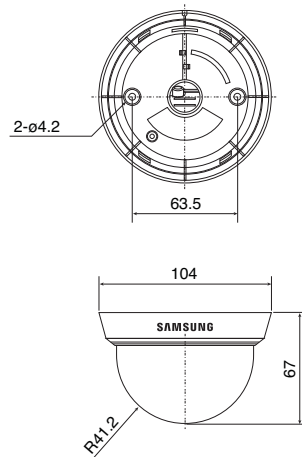
Troubleshooting

If you have trouble operating your camera, refer to the following. If the guidelines do not enable you to solve the problem, contact an authorized technician.

- The image on the screen is dim.
 - Check if the lens are stained. If dirty, clean the lens with soft, clean cloth.
 - The image is dimmer at night than daytime. If the focus is not right, adjust it at daytime.
- The contrast on the screen is too weak.
 - Adjust the contrast feature of the monitor.
 - If the camera is exposed under too strong light, change the camera position.
 - Adjust the lens BACK FOCUS again.
- The camera is not work properly, and the surface of the camera case is hot.
 - Check that you have connected the camera to a proper power (DC 12V)

MINI DOME CAMERA 13 USER'S MANUAL

Dimension



MINI DOME CAMERA 14 USER'S MANUAL

Specification

ITEM	SID-53N	SID-53P	SID-56N	SID-56P
Power Source	DC 12V±10%/Max. 1.8W			
CCD	1/3 inch, Sony Super HAD CCD			
	Total Pixels	811(H) x 508(V)	795(H) x 596(V)	811(H) x 508(V) / 795(H) x 596(V)
	Effective Pixels	768(H) x 494(V)	752(H) x 582(V)	768(H) x 494(V) / 752(H) x 582(V)
Sync.	2:1 Interlace			
	Synchronization	Internal Only		
Frequency	15.734 KHz	15.625 KHz	15.734 KHz	15.625 KHz
	59.94 Hz	50.00 Hz	59.94 Hz	50.00 Hz
Resolution	580 TV Lines(Min.)			
	S/N(Y signal)	52 dB (AGC Off, Weight ON)		
Video Output	1.0Vp-p/75Ω (Video 0.714Vp-p Sync 0.286Vp-p)			
Min.Illumination	0.04 Lux/F1.2(Sens-up)			
	Auto Functions	Electronic shutter speed	AUTO	
WHITE BALANCE		AUTO		
BACKLIGHT		AUTO		
Gain Control		AUTO		
SENS-UP		AUTO		
SSNR(Noise Control)		AUTO		
SHARPNESS	AUTO			
Lens(Built-in)	Fixed Lend f=3.0mm, F2.0		Fixed Lend f=6.0mm, F2.5	
Monitoring	Pan	Manual 360°		
	Tilt	Manual 20° ~ 90°		
Angle	Manual 20° ~ 90°			
Operating temperature/Humidity	-10°C to +50°C / 30% to 80% RH			
Storing Temperature / Humidity	-20°C to +60°C / 30% to 90% RH			
Dimension	Ø104 x 67mm(H)			
Weight	180g			

MINI DOME CAMERA 15 USER'S MANUAL

Declaration of Conformity

Application of Council Directive(s)	89 / 336 / EEC
Manufacturer's Name	SAMSUNG TECHWIN CO., LTD
Manufacturer's Address	SAMSUNG TECHWIN CO., LTD 42, SUNGJU-DONG CHANGWON-CITY, KYUNGNAM, KOREA, 641-120

European Representative Name	
European Representative Address	
Equipment Type/Environment	MINI DOME CAMERA
Model Name	SID-53/56
Beginning Serial NO.	S6300001
Year of Manufacture	2008. 04. 01
Conformance to	EN 50081-1 : 1992 EMC-Directive 89/336 EEC and 92/31/EEC EN 50130-4 : 1996

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

Manufacturer	SAMSUNG TECHWIN CO., LTD	Legal Representative in Europe
Signature	<i>Young Tae Son</i>	Signature
Full Name	YOUNG TAEK SON	Full Name
Position	QUALITY CONTROL MANAGER	Position
Place	CHANGWON, KOREA	Place
Date	2008. 04. 01	Date

MINI DOME CAMERA 16 USER'S MANUAL